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August 29, 2019

Marlene H. Dortch
Secretary Federal Communications Commission
Office of the Secretary
236 Massachusetts Ave., NE
Washington, DC 20002

Comments on:
WC Docket No. 18–213
Promoting Telehealth for Low-Income Consumers

Dear Ms. Dortch:

The undersigned are submitting the comments below in response to the above referenced proceeding.

In October 2016, the President's Cancer Panel – a legislatively required advisory panel tasked with overviewing the nation's fight against cancer – released a report recommending the use of connected health solutions to improve outcomes for cancer patients. These connected health solutions, argued the panel, would be especially relevant to the nation's efforts to address a growing inequality in health outcomes for residents in rural America. Over several decades, health outcomes in low-income, rural or underserved regions of the US have not kept pace with overall improvements in morbidity and mortality. For example, according to the Centers for Disease Control and Prevention, Americans living in rural areas are more likely to die of cancer than their counterparts in other settings, who have experienced a 20% decrease in cancer mortality. Other research demonstrates that patients who live away from cancer treatment centers or hospitals and travel more than 50 miles tend to a) present with a more advanced stage of cancer, b) have lower rates of early detection and screening, and c) often have lower adherence to cancer treatments, worse prognoses, and lower quality of life. Following release of the connected health report, the Chairman of the FCC and the Acting Director for the National Cancer Institute jointly signed a memorandum of understanding linking these two agencies in a concerted effort to improve access to connected health solutions in underserved areas. One of the flagship endeavors from the collaboration is the Linking and Amplifying User-Centered Networks through Connected Health (LAUNCH) initiative. The LAUNCH initiative (further described in the additional material beginning on page 6 of this letter) is a ground-breaking public-private partnership tasked with improving the delivery of cancer care to underserved Americans starting in rural Appalachia. Described further on the appended document to these comments, this project has engaged the FCC's Connect2Health Task Force with collaborators at the National Cancer Institute and Amgen Corporation to address the "dual burden" problem of the care of

cancer in low income rural parts of Eastern Kentucky. Other partners have been the Markey Cancer Center of the U. of Kentucky and the Design Lab at the U. of California, San Diego. It is from the context of the LAUNCH initiative that we provide comments on WC Docket No. 18-213: Promoting Telehealth for Low-Income Consumers.

Cancer is just one example of an increasingly chronic disease that disproportionately impacts residents in these regions. Concomitant with these poor health outcomes, rural areas often suffer a greater burden of social determinants of health, fewer social resources during treatments, and less opportunity for community engagement among long-term survivors. In addition, FCC broadband data indicate that these underserved and rural areas of our country face major gaps in high-speed internet access and adoption, creating further exacerbations in the social determinants of health and subsequent deficits in health care and health outcomes. Thus, we concur with the conclusions drawn by both the FCC's Connect2Health Task Force and the American Medical Informatics Association that inadequate access to broadband and consequently to lifesaving health information and healthcare services (i.e., the so-called "Digital Divide") has been formally recognized in the 21st Century as a social determinant of health.

Thus, we commend the FCC for recognizing an opportunity to improve health outcomes by enhancing connected care for underserved Americans and evaluating how this enables patients to stay directly connected to health care providers through telehealth services might lead to such health improvements. We believe that the FCC's Pilot Program to enable telehealth services presents an unprecedented opportunity to gain new knowledge on how the medical and public health communities can utilize connected health technologies to move evidence-based medical innovations equitably to all populations. The pilot program, we believe, is more than a simple remediation for inadvertent inequality. Structured appropriately, the program can become a living laboratory for testing solutions for the "last mile problem" in health care. It can provide the technical and medical knowledge needed to ensure that no patient is left behind as medicine advances.

This background allows us to envision, in these connected care demonstration projects, the opportunity to evaluate and scale the FCC effort nationally through the power of broadband-enabled health technologies and solutions to positively transform the future of connected care throughout the country, especially in rural areas. As public health advocates and researchers, we see a great opportunity and value in considering a robust cross-sector collaboration among funded programs that could lead to shared learning, diverse strategies, common evaluation, and participatory methods to maximize sustainability and population impact.

Based upon the background described above, our direct experience as Co-Investigators on the LAUNCH project, and our collective experience with similar initiatives over the past 30 years in major funding initiatives that are intended to improve public health through community-based interventions, we offer to the FCC the following specific recommendations as it considers the next phases in selecting and awarding these funds. We think these recommendations will help improve the likelihood that the goals and objectives of the FCC's Connected Care Pilot Program is successful in addressing the "dual burden" in communities that have both limited or no access to broadband technologies, and higher levels of chronic medical conditions that require sophisticated methods of communication to manage.

Where possible in these recommendations, we have called out specific numbered sections in the Federal Register Announcement for which they might apply. However, these are meant to be neither fully

comprehensive nor exclusive of other interpretations that the FCC program staff might make. They mainly represent our read of the announcement and where the recommended activities might be helpful.

Before and during the application and proposal review process:

1. Consider an "orientation session" for prospective applicants aimed at enhancing applicants' understanding of the FCC's goals and objectives for this program. In our experience, many of the communities you most want to attract as applicants may have limited knowledge about how to apply. The orientation could be provided via webinar and then electronically archived for reliable access by communities throughout the application period. This could expand the applicant pool to those with experience in health-related fields and reduce the bias of receiving only quality applications from those with a long history of writing and securing funding from the FCC. (Paragraphs 40, 41)

2. It will be important for FCC to signal early in this process what the metrics of success for the pilot program will be. This will ensure that applicants have a clear understanding about what they are to accomplish and, perhaps, how quickly they are to do so. Again, some applicants will know how to set these up in their applications. But some might have less expertise, but still be among the most compelling in terms of the innovation and value proposition they bring to the table. (Paragraphs 40, 41, 78, 80, 82, 89, 90)

3. FCC might consider language in the call for proposals that encourages applicants to consider working with existing partners who have already developed a track record in addressing dual-burden settings. Cross-sector community engagement could also be encouraged and/or weighted in a selection process. (Paragraph 46, 77, 79)

4. We encourage the FCC to work with its Connect2Health Task Force, given its multisector composition and approach, to ensure that language in the program announcement addresses key elements that are important to the long-term success of the project. This might include such things as a call for "innovative public-private partnerships" that would encourage, for example, academic and non-government organization applicants to bring in private sector and policy-oriented partners (e.g., local government, pharma, tech/comm, business, health system) at the outset. (Paragraphs 46, 77, 79)

5. We encourage the FCC to consider finding ways to fund highly innovative and "out of the box" projects that do not conform to the traditional, incremental approaches that are commonly funded. In part, this would be meant to broaden the circle of funded entities who might have novel and impactful projects, but who do not yet have the visibility of the larger and more traditional entities who usually get funds like these. (Paragraphs 46, 87)

6. We encourage the FCC to ensure that experts in the health sector be considered as part of the review process. Expertise might include an emphasis on community-based participatory methods, implementation science, human centered design, and the application of telehealth approaches in low-income settings as key aspects of the review process after proposals are submitted. We also encourage that the criteria for funding decisions consider key principles that are outlined in seminal policy documents such as the Vital Directions efforts of the National Academy of Medicine. (Paragraphs 45, 46)

After the awards are made:

1. We encourage the FCC to consider creating ongoing technical assistance to applicants so that they are able to consult on areas in which they lack specific strengths and capabilities. Such assistance could be offered via a combination of webinars, one-on-one virtual or in person consultation or workshops intended to help applicants with structural, process and outcome evaluation related issues. In our experience, this can be enormously helpful to entities who would not otherwise have this help. (Paragraphs 40, 41, 78, 80, 89)

2. We encourage the FCC to convene an annual meeting of awardees beginning in the first quarter of the first year of awards. The intent for this would be to help improve awardee understanding of the overall program goals and objectives, including any updates that might occur over the life of the project. As the pilot project progresses, it would enable awardees to identify common problems and potential solutions, share learnings and otherwise improve the overall chances of success of any given project. Importantly, other entities that might be stakeholders in the overall Pilot Program but who are not awardees could be invited to participate in these meetings as well. Examples include CMS, the National Coordinator for Health Information Technology (ONC), the Health Resources and Services Administration (HRSA), and the Indian Health Service. The Virginia Telehealth Network. Their contributions could be considerable in terms of both understanding the progress of the Pilot Program, and aligning the FCC efforts with their own related projects. Costs for participation in these meetings could be specifically called out in the final Program Announcement so that participants expect them and budget appropriately. We have been involved in numerous national scale projects such as your pilot program over the years and have found that those who do this are much more likely to make an impact. (Paragraphs 78, 79, 80, 81, 90)

3. We encourage the FCC to empanel one or more expert groups in medicine, public health, communications technologies, and/or user-centered design who can participate with the FCC in an ongoing evaluation process for the program that combines concurrent formative evaluations with summative evaluations at the end of any given project. If possible, we recommend beginning this process before you release your final funding announcement so that you are clear on "where you want this project to go" before starting down that road. (Paragraphs 40, 41, 78, 80, 82, 89, 90)

4. Finally, we encourage the FCC to position the learnings from Connected Care Pilot efforts within ongoing health policy efforts of the National Academies in both health and technology. While this might happen spontaneously, specific attention to this as the Program Announcement is being developed, and as the project moves forward over the 4-5 years it is in place will be very important. Importantly, National Academies studies are supported by funds provided by stakeholders who have an interest in them. Thus, we recommend a small amount of funds for these efforts be "baked in" to the pilot program so that they can ensure that the project makes an impact in ways that are aligned with the health goals and objectives of the entire nation. (Paragraphs 77, 78, 79)

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Lisa Klesges, PhD, MS is a Senior Advisor in the Health Communication and Informatics Research Branch at the National Cancer Institute (consulting contractor). Her responsibilities include special projects in

public health including implementation of mobile health and community behavior change interventions. Her interests include a focus on rural cancer control, and systems and multi-level methodologies to support design and evaluation of population health improvement programs. Dr. Klesges is Professor of Surgery in the Division of Public Health Sciences at Washington University, and as Professor and Founding Dean Emeritus of the School of Public Health, University of Memphis.

Tim Mullet, MD, MBA, FACS is a Thoracic Surgeon & Medical Director for UK Markey Cancer Center Affiliate and Research Networks. He is Kentucky state chair for the Commission on Cancer and Co-investigator on the KY LEADS Collaborative to improve lung cancer, and has been a Co-investigator on the LAUNCH project since the inception of the program. Dr. Mullett serves on the Commission on Cancer, a consortium of professional organizations dedicated to improving survival and quality of life for cancer patients across the country. Dr. Mullett is one of eight surgeons from across the country elected to represent the fellowship.

Kevin Patrick, MD, MS is Professor, Department of Family Medicine and Public Health, UCSD School of Medicine and Senior Advisor for Innovation in Wireless Medicine and Digital Health, UCSD Health Sciences. Dr. Patrick served as Editor-in-Chief of the American Journal of Preventive Medicine from 1994-2013, and has served on the Secretary's Council for Health Promotion and Disease Prevention of the U.S. Department of Health and Human Services and on the Defense Health Board. His research focuses on the use of wearable technologies, smartphone apps, mobile video and social media to measure health states and promote health behavior change. Dr. Patrick has been a LAUNCH Co-Investigator since the inception of the program.

L.A.U.N.C.H: Catalyzing A New Era in Connected Cancer Care for Appalachia

Everyone connected . . . to the people, services, and information they need to get well and stay healthy.

According to the Centers for Disease Control and Prevention, Americans living in rural areas are more likely to carry a higher burden of cancer than their counterparts in urban settings. These rural "cancer hotspots" also face major gaps in broadband access and adoption, often putting promising connected care solutions far out of reach. Recent data shows that cancer patients who are provided with a real-time mechanism to report their symptoms triggering clinicians to intervene if necessary have better outcomes, including improved survival rates (Basch et al., 2017).

The Challenge: How do we take current insights about rural cancer care and leverage uquitous connectivity to improve outcomes for patients living in rural and underserved communities? And how do we develop connected cancer care solutions that can be scaled nationally?

What is L.A.U.N.C.H.? In 2017, the National Cancer Institute and the Connect2HealthFCC Task Force joined forces to address these challenges, and the L.A.U.N.C.H. initiative *Linking & Amplifying User-Centered Networks through Connected Health: A Demonstration of Broadband-Enabled Connected Health and Community-Based Co-Design* was born. L.A.U.N.CH. is a multi-stakeholder collaborative that seeks to address one of the key challenges of rural cancer care: quality symptom management. The goal is to improve the lives of cancer patients living in rural areas, who bear the double burden of having the highest cancer mortality rates and lowest levels of broadband access. L.A.U.N.C.H. has five core ingredients:

- **Cutting-edge symptom management enabled by broadband.** This demonstration project will focus on how ubiquitous broadband connectivity can be leveraged to improve symptom management for rural cancer patients, one of the key priorities of the 2016 Blue Ribbon Panel. Early deliverables will include a Platform for Agile Development (the "L.A.U.N.C.H. PAD") to help communities codesign better cancer symptom management tools and practices using connectivity.

- **Robust cross-sector collaboration**. In the 2016 President's Cancer Panel report, *Improving Cancer- Related Outcomes with Connected Health*, cross-sector collaboration was viewed as essential to the future of cancer care. Harnessing the power of the collective, this unique coalition combines government, academia, and private sector partners who each bring a unique perspective and skillset to bear on solving this difficult problem.

- **User-centered design methodologies.** Who better to solve health problems in rural communities than rural residents . . . provided they are supported with the right tools and are empowered to act? This human-centered way of thinking is what sets this project apart. Empowering rural communities is not just about the deployment of new technologies; to be successful long term, this effort must include a process of ground-level inquiry and listening. What are the real, last-mile problems that patients, providers, and communities face? What solutions have already been tried, and what made those successful or unsuccessful? The L.A.U.N.C.H. project will couple this type of field-based, empirical

inquiry with a bold, imaginative vision of the future of connected cancer care.

- **Sustainability and scalability.** By thinking nationally and acting locally, we can find sustainable, scalable solutions for solving local health challenges through the power of connectivity. By succeeding, the project aims to show that connectivity can improve access to needed healthcare services anywhere in the country.

- **Improved broadband access and adoption for health.** The L.A.U.N.C.H. project will focus on areas that face the dual challenge of higher cancer mortality rates and lower levels of broadband access and adoption.

Why Appalachian Kentucky? Appalachian Kentucky represents a unique opportunity for leveraging connected health solutions both because of heightened need in the region and the regional ethos of community solidarity and grassroots problem solving. In Appalachia, cancer incidence and mortality are higher than other rural regions of the country; patients may also present younger and at more advanced stages. Patients diagnosed with cancer in rural Appalachia often face additional challenges to managing their symptoms and receiving care, including economic insecurity, geographic isolation, transportation challenges, other health concerns, and limited specialty care. Meanwhile, lower rates of broadband availability and adoption (40% of the Kentuckians in rural areas lack access to high-speed Internet) relative to other parts of the country limit the reach of connected health solutions that may have the potential to address these challenges.

Current Collaborators

- **The National Cancer Institute**

The National Cancer Institute (NCI) is the Presidentially-appointed steward of the nation's war on cancer and, as part of the National Institutes of Health, is the nation's premier funding agency for cancer research. In 2016, the U.S. Congress passed legislation to fund the Cancer Moonshot[SM], which challenged the NCI to accomplish in five years what would normally take 10 years in terms of reducing the nation's burden from cancer.

- **Federal Communications Commission Connect2Health[FCC] Task Force**

The Federal Communications Commission (FCC) is the United States' primary authority for communications law, regulation and technological innovation. Founded on the vision of "Everyone *connected*. . . to the people, information and resources they need to get healthy and stay well," the Connect2Health[FCC] Task Force is working to bridge the digital broadband health gap and promote broadband access and adoption for health.

- **Amgen**

Amgen is a large biotechnology company that has been working in oncology for over 30 years. Acutely aware of the impact of cancer side-effects and the importance of supporting patients throughout their cancer journey, Amgen will bring its expertise in navigating healthcare systems to advance innovative ideas and deliver them into the hands of patients.

- **The Design Lab at UCSD**

The Design Lab is the epicenter of people-centered design. Its role in L.A.U.N.C.H. is to bring this people- centered thinking to address cancer symptom management.

- **University of Kentucky Markey Cancer Center**

The NCI-designated University of Kentucky Markey Cancer Center has been at the forefront of combatting cancer and its related disparities in Kentucky for over 40 years. With a special focus on Appalachian Kentucky, the Markey Cancer Center is dedicated to working hand-in-hand with communities to bring research, clinical care, provider education, and cancer education and services to its constituents.

Questions? To learn more about how you can participate or join our mailing list, visit www.fcc.gov/health/cancer or contact David Ahern at launch@fcc.gov or david.ahern@fcc.gov.